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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,910	08/08/2007	Jonathan Seckl	9013-73	1092
	7590 04/23/200 L SIBLEY & SAJOVE	EXAMINER		
PO BOX 37428			KOSAR, AARON J	
RALEIGH, NC 27627			ART UNIT	PAPER NUMBER
			1651	
			MAIL DATE	DELIVERY MODE
			04/23/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Comments	10/589,910	SECKL ET AL.				
Office Action Summary	Examiner	Art Unit				
	AARON J. KOSAR	1651				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence ad	dress			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
	-· action is non-final.					
<i>,</i> —		secution as to the	morite is			
	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
closed in accordance with the practice under £	x parte Quayle, 1955 C.D. 11, 45	03 O.G. 213.				
Disposition of Claims						
4) Claim(s) 47-86 is/are pending in the application	١.					
4a) Of the above claim(s) is/are withdraw						
5) Claim(s) is/are allowed.						
6) Claim(s) is/are allowed.						
7) Claim(s) is/are objected to.						
· · · · ·	olootion requirement					
8) Claim(s) <u>47-86</u> are subject to restriction and/or	election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex	,		` '			
	animer. Note the attached Office	Action of formal a	0 102.			
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of the prior application for a list of the priority documents. 	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National	Stage			
Attachment(s) 1) \[\sum \text{Notice of References Cited (PTO-892)} \]	4) ☐ Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	nte				
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal P	atent Application				
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DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 47-68, drawn to a method of treating cancer/disorder.

Group II, claim(s) 69-84, in part, drawn to a method of detecting a steroid level.

Group III, claim(s) 69-84, in part, drawn to a method of detecting an enzyme level.

Group IV, claim(s) 69-84, in part, drawn to a method of detecting a sequence mutation.

Group V, claim(s) 85, drawn to a method of assaying agents.

Group VI, claim(s) 86, drawn to a use of agents identified in the method of Group V.

The inventions listed as Groups I-VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

37 CFR § 1.475 states,

- (a) An international and a national stage application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept ("requirement of unity of invention"). Where a group of inventions is claimed in an application, the requirement of unity of invention shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.
- (b) An international or a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn only to one of the following combinations of categories:
 - (1) A product and a process specially adapted for the manufacture of said product; or

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(2) A product and process of use of said product; or

- (3) A product, a process specially adapted for the manufacture of the said product, and a use of the said product; or
- (4) A process and an apparatus or means specifically designed for carrying out the said process; or

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- (5) A product, a process specially adapted for the manufacture of the said product, and an apparatus or means specifically designed for carrying out the said process.
- (c) If an application contains claims to more or less than one of the combinations of categories of invention set forth in paragraph (b) of this section, unity of invention might not be present.
- (d) If multiple products, processes of manufacture or uses are claimed, the first invention of the category first mentioned in the claims of the application and the first recited invention of each of the other categories related thereto will be considered as the main invention in the claims, see PCT Article 17(3)(a) and § 1.476(c).
- (e) The determination whether a group of inventions is so linked as to form a single general inventive concept shall be made without regard to whether the inventions are claimed in separate claims or as alternatives within a single claim.

According to 37 CFR 1.475(d), if multiple processes are claimed, the first invention of the category first mentioned in the claims is the main invention; in the instant case, claim 47, the first recited invention category, is drawn to a method of treating a cancer or disorder further categorized as a method of using an ER β modulator. Groups II-VI recite additional methods of using starting materials that are different than that employed by the method of Group I and therefore are placed into separate groups.

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Species of cancer or disorder as in claims 56-58; elect ONE cancer or disorder species (e.g. (a) BHP or (b) prostatitis or (c) prostate cancer or (d) breast cancer); elect ONE if Group I is elected.

Species of ER β modulator as in claim 50 comprising: (e) a 7-hydroxylated steroid; (f) an enzyme capable of catalyzing a steroid; elect ONE if Group I is elected.

Species of enzyme source as in claims 59-64 comprising: (g) an enzyme; (h) a cell comprising an enzyme; (i) a transformed cell containing a gene encoding an enzyme; elect ONE if Group I and species (f) are both elected.

Species of enzyme modification as in claims 59-61, comprising: (j) unmodified/enzyme per se; (k) modified to improve substrate affinity; elect ONE if Group I and any of species (g), (h), or (i) are both elected.

Species of biopsy or body fluid as in claims 73-75, comprising: (1) prostate biopsy; (m) breast biopsy; (n) blood; (o) urine; (p) semen; elect ONE if any of Groups II, III, and IV is elected.

Applicant is required, in reply to this action, to elect a single species for each variable in the claims, as directed above, to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species as listed above.

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The following claim(s) are generics: claims 47-49, 69, 85, and 86.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

The species lack unity, because the species are directed towards Markush groups of which the species therein do not share a common structural or functional feature and do not belong to a recognized class of chemical compounds. Since the species do not share a common technical feature and because the species may be separately classified and do not belong to a recognized class of chemical compounds, the species cannot have a special technical feature and unity of invention is lacking. In the instant case species (a)-(d) are drawn to unrelated conditions (cancer versus hyperplasia versus enlargement); in species (a)-(d) and (l)-(p), unrelated tissues/samples (breast, prostate, blood, urine, semen); in species (e)-(i), unrelated compounds (an enzyme versus a steroid versus a cell versus a mutant). Furthermore there is nothing of record to indicate the species as having a common or shared functional feature.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the

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currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON J. KOSAR whose telephone number is (571)270-3054. The examiner can normally be reached on Monday-Thursday, 7:30AM-5:00PM, ALT. Friday,EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on (571) 272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Aaron J Kosar/ Examiner, Art Unit 1651

/Lora E Barnhart/
Primary Examiner, Art Unit 1651